Sindernova, v. J.

"The History of Resevoirs of the Transurals," Doklady Adademii Nauk, Vol 51, No 3, 1946 (132-143).

(Meteorologiya i Gidrologiya, No 6 Nov/Dec 1947)

So: U-3218, 3 Apr 1953

SHESHUKOVA, V. S. SHESHUKOVA, V. 3. Diatomovyye vodorosli ilovykw otlozheniy i podstilayushchikw ikw glin iz ozer Onego-Belomorskogo vodorazdela. Trudy Leningr. o-va estestvoispytateley, t. LXIX, vyp. 3, 1949, s. 177-97. — Bibliogr: 8 Nazv 21590

SO: Letopis' Zhurnal'nykh, Statey, No. 29, Moskwa, 1949

SHESHUKOVA, V. S.

Kamyshlov District--Algae, Fossil

History of the ponds of the Trans-Ural region based on the study of their diatomaceous flora. Part 1., Lakes of the Kamyshlov District. Trudy Lab. sapr. otl., No. 5, 1951

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

- 1. V. S. SHESHUKOVA
- 2. USSR (600)
- 4. Algae, Fossil Don River
- 7. Material for the study of diatomaceous algae in Cenozoic deposits of the Lower Don. Nauch, biul. Len. un. no. 28. 1951

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

TOPACHEVS'KIY, O.V. [reviewer]; GOLLERBAKH, M.M.; POLYANSKIY, V.I.; ZABELINA, M.M.; KISELEV, I.A.; PROSHKINA-LAVRENKO, A.I.; SHESHUKOVA, V.S. [authors].

Review of the "Guide to fresh-water algae of the U.S.S.R." (no.1: "Study of fresh-water algae. General survey," M.M.Gollerbakh, V.I.Polianskii; no.4: "Diatomaceous algae," M.M.Zabelina, I.A.Kiselev, A.I.Proshkina-Lavrenko, V.S.Sheshnkova). O.V.Topachevs'kiy. Bot.zhur.[Ukr.] 9 no.1:87-88 '52. (MIRA 6:11)

(Algae) (Gollerbakh, M.M.) (Zabelina, M.M.)

PROSHKINA-LAVRENKO, A.I., redaktor; SHESHUKOVA, V.S., redaktor.

[Symposium on diatoms, dedicated to the memory of Professor V.S.Poretskii] Diatomovyi sbornik, posviashchennyi pamiatti professora V.S.Poretskogo. Leningrad, Izd-vo Leningradskogo gos. universiteta, 1953. 228 p. (MLRA 7:6)

 Leningrad, Universitet. Biologo-pochvennyy fakulitet. (Diatoms)

GOLLERBAKH, M.M., professor; KOSINSKAYA, Y e.K.; POLYANSKY, V.I., professor; MATVIYENKO, A.M.: ZABELINA, M.M.; KISELEV, I.A.; PROSHKINA-LAVRENKO, A.I.; SHESHUKOVA, V.S.; POPOVA, T.G.; SAVICH, V.P., professor, zasluzhenny deyatel's nauki RSFSR, redaktor; STREL'NIKOVA, L.I., tekhnicheskiy redaktor; GRIBOVA, M.P., tekhnicheskiy redaktor; GUBER, tekhnicheskiy redaktor; KHROSH, A.I., tekhnicheskiy redaktor; KOROLEVA, L.I., tekhnicheskiy redaktor.

[Guide to the fresh-water algae of the U.S.S.R.; in 14 volumes]
Opredelitel' presnovednykh vodoroslei SSSR; v chetyrnadtsati
vypuskakh. Redaktsionnaia kollegiia: M.M. Gollerbakh, V.I.Polianskii, V.P.Savich(otv.redaktor) Moskva, Gos.izd-vo "Sovetskaia
nauka." No.2[Blue-green algae] Sinezelenye vodorosli. 1953. 651 p.
no.3[Chrysophyta] Zolotistye vodorosli, 1954. 187 p. No.4[Diatomaceae] Diatomovye vodorosli 1951. 618 p. No. 6[Pyrrophyta]
Pirofitovye vodorosli 1954. 211 p. No.7[Euglenophyta]Evglenovye
vodorosli 1955. 282 p.

(Algae)

SHESHUKOVA-PORETSKAYA, V.S.

History of waters of the trans-Ural region based an a study of their diatomaceous flora. Uch.zep.Len.un.no.191:105-162 *55.
(Ural Mountain region-Diatoms) (MLRA 9:7)

SHESHUKOVA-PORFITSKAYA, V.S.

Diatomaceous algae of marine intermerainic deposits of the Kurepean U.S.S.R. Uch.zap.Len.un.no.191:163-192 '55. (Diatoms, Fossil) (MLRA 9:7)

Sheshukoun-PorelskayA, U.S.

15-1957-7-9089

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 7,

pp 36-37

AUTHOR:

Sheshukova-Poretskaya, V. S.

TITLE:

On the Fossil Genus Rouxia Brun and Heribaud (Bacil-lariophyta) (0 iskopayemom rode Rouxia et Heribauol

(Bacillariophyta))

PERTODICAL:

Botan. Materialy Otol. sporovykh rast. Botan. in-t.

AN SSSR, 1956, vol 11, pp 64-75

ABSTRACT:

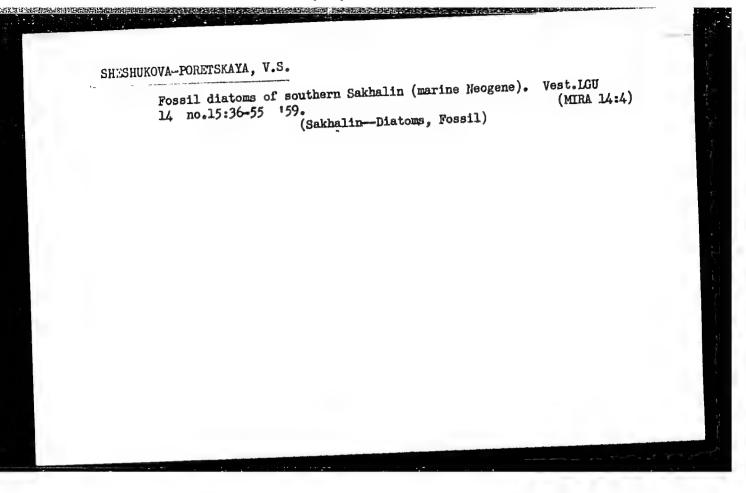
The genus of diatomaceous alga Rouxia Brun and Heribaud is described in detail. An exhaustive critical survey of the literature concerning this fossil genus is made. The genus Rouxia is a connecting link between genera having sutures on one valve only and true Diraphineae with sutures on both valves. There is a very close kinship, apparently, between Rouxia and Peronia, which has rudimentary sutures on only one of its valves. The genus includes four species. One of

Card 1/2

SHESHUKOVA-PORETSKAYA, V.S.

New and interesting species of diatoms from trans-Ural bodies of water. Bot.mat.Otd.spor.rast. 11:76-81 Ja '56. (MIRA 9:11)

 Kafedra botaniki Leningradskogo gosudarstvennogo universiteta. (Ural Mountain region--Diatoms)



SHESHUKOVA-PORETSKAYA, V.S.

Diatoms of some peat bogs of the Baltic shore; the Estonian S.S.R. and Kaliningrad Province. Uch. zap. LGU no.313:137-170 (MIRA 15:12)

(Estonia-Diatoms) (Kaliningrad Province-Diatoms)

SHESHUKOVA-PORRITSKAYA, V.S.; GLEZER, Z.I.

Diatoms, Silicoflagellatas and Ebrideae from Maikop sediments in the Shibik River; Krasnodar Territory. Uch. zag. IGU no.313:171-202 '62. (MIRA 15:12) (Shibik River—Algae, Fossil)

SHESHUKOVA PORETSKAYA, V.S. New and rare Bacillariophyta from the diatom series of Sakhalin.
Uch. zap. LGU no.313:203-211 162. (MIRA 15:12)

(Sachalin-Diatoms, Fossil)

SHESHULIN, G.I.

Composition of gas-liquid inclusions in minerals of spodumene.

Geol.mest.red.elem. no.9:67-79 '61. (MIRA 14:9)

(Spodumene) (Pegmatites)

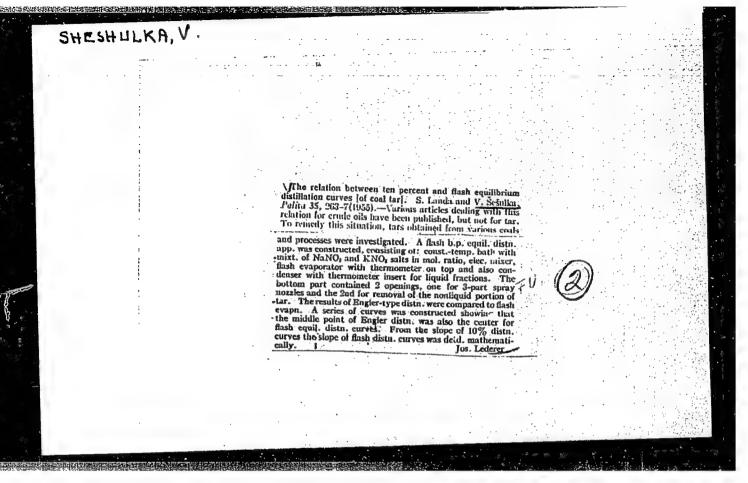
FUZANOV, L.S.; SUDERKIN, A.I.; SHESHULIN, G.I.; BORZAKOV, B.A.; GUDKOV, A.S., nauchryy red.; SEMILETKOVA, Ye.K., red. izd-va; SHMAKOVA, T.M., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials]Trebovaniia pronyshlennosti k kachestvu mireral-nogo syr'ia; spravochnik dlia geologov. Moskva, Gosgooltekhizdat. No.31[Piezoelectric and optical minerals]P'ezoelektricheskoe i opticheskoe syr'e. Izd.2., perer. 1962. 46 p. (MIRA 15:10)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Fluorite)

(Quartz) (Iceland spar) (Fluorite)



BUTSLOV, M.M.; MEDVEDEV, M.N.; FILIPPOV, P.I.; CHUVILO, I.V.; SHESHUNOV, V.M.

Recording of a Vavilov-Cherenkov radiation cone from isolated particles. Atom. energ. 12 no.5:412 My '62. (MIRA 15:5) (Cherenkov radiation)

SHESHUNOVA, V.

Sheshunova, V. (Exchange of Experience) Help in the work of the regional mining inspect-ors of the Central Statistical Bureau, USSR. P. 61

SO: Herald of Statistics (Vestnik), No. 2, 1951

SHESKIN, A.

Tool for sharpening safety-razor blades. Prom.koop.no.8:29-31
(MIRA 9:1)
Ag 155.

1.Starshiy inzhener proizvodstvenno-tekhnicheskogo upravleniya promsoveta Estonskoy SSR.
(Razors)

SHESKIN, F. M. -- "The Use of Streptomycin in Tuberculosis of the Kid-SHESKIN, F. M. -- "The Use of Streptomycin in Tuberculosis of the Kidneys." Kiev Order of Labor Red Banner Medical Inst imeni Acade-

mician A. A. Bogomolets. Kiev, 1956. (Dissertations for the Degree of Candidate in Medical Sciences).

SO: Knizhnaya Letonis', No 9, 1956.

SHESKIN, F.M., kand.med.nauk

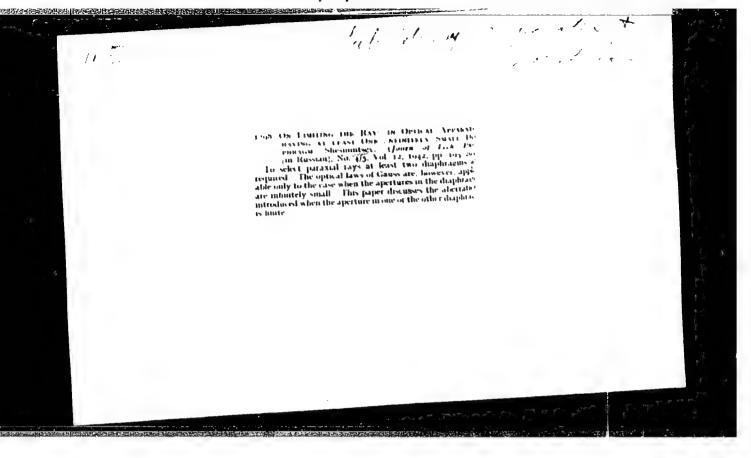
Conservative treatment in tuberculous epididymitis. Vrach. (MIRA 15:6)

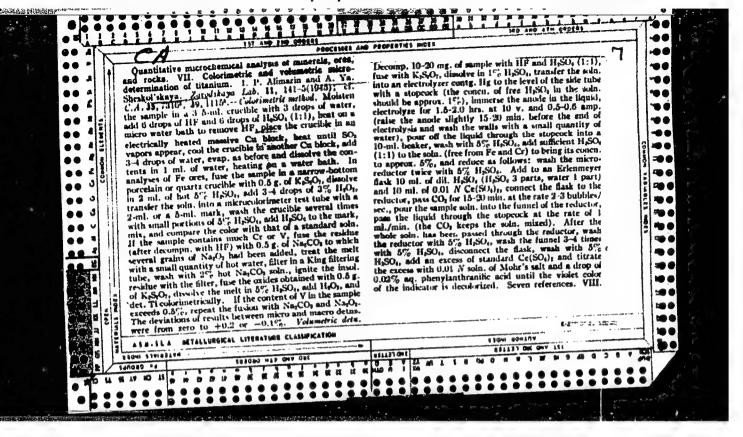
1. Poliklinicheskoye otdeleniye 2-y bolinitsy Oktyabriskogo rayona Kiyeva.

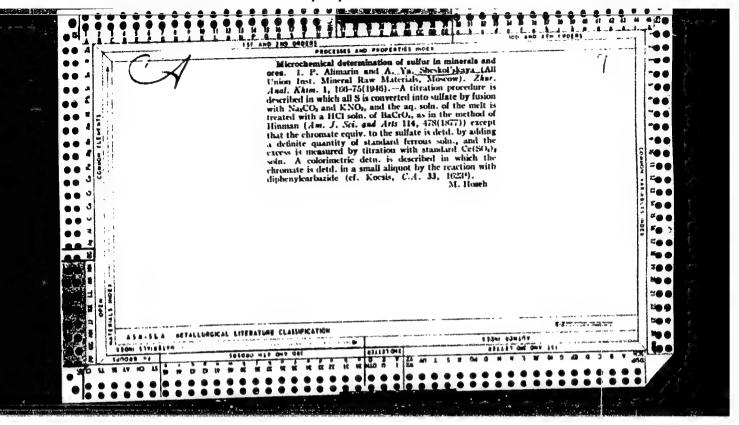
(EPIDIDYMIS-TUBERCULOSIS)

"APPROVED FOR RELEASE: 08/09/2001 CIA-

CIA-RDP86-00513R001549310013-4





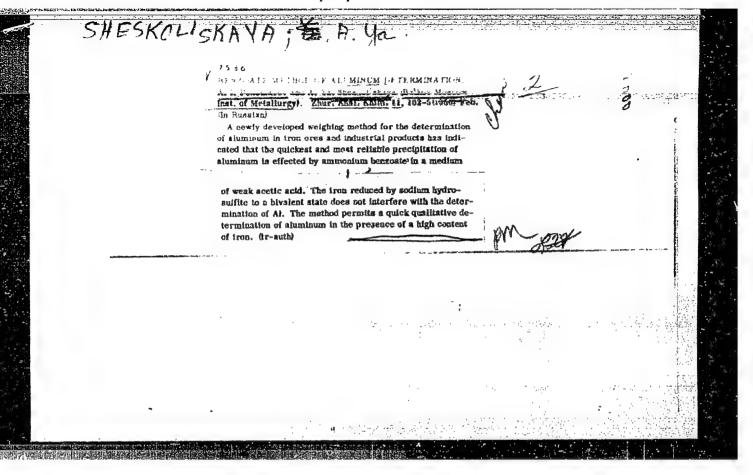


SHESHVALSHAIA, A. YA.

All-Union Sci. Rec. Inst. of Econ. Mineralogy, Moscow (1946)

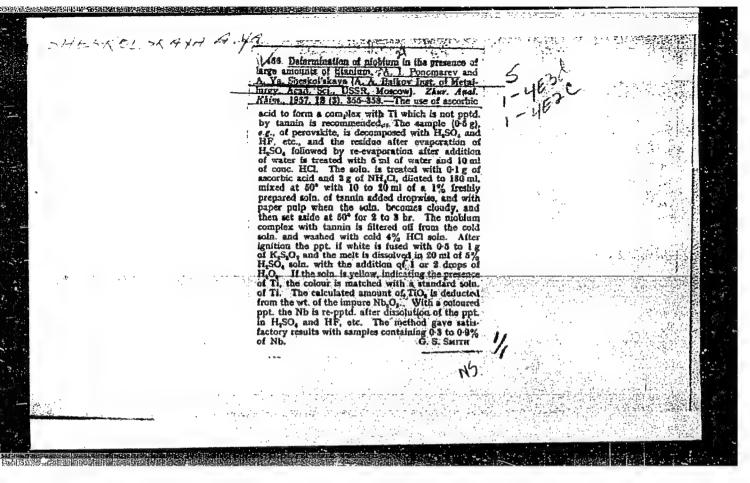
Whee Quantitative Microchemical Determination of Sulphur in Minerals and Cils,"

Zhur. Analit. Min., No. 2, 1946.



"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001549310013-4



5(2),5(3)Ponomarev, A. I., Sheskol'skaya, A. Ya. SOV/75-14-1-15/52 AUTHORS: Determination of Miobium in the Presence of Tungsten by the TIPLE: Aid of Cupferron (Opredeleniye niobiya v prisutstvii vol'frama pri pomoshchi kupferona) Zhurnal analiticheskoy khimii, 1959, Vol 14, Er 1, pp 67-70 PERIODICAL: (USSR) A method is devised in the present paper, permitting the ABSTRACT: determination of niobium in alloys, steels and other objects containing tungsten, without prior separation of the two elements. 3 niobium standard solutions were employed for the elaboration of this method: with tartaric acid, with oxalic acid and with ammonium oxalate. The determination takes place by precipitation of niobium with a 3% aqueous solution of cupferron from hydrochloric solution, containing one of the three mentioned complex-forming compounds. The precipitate is filtered off, annealed and then decomposed with potassium pyrosulfate. After cooling, a solution of oxalic acid, ammonium oxalate or tartaric acid is added, wherein the melt is soluble on heating.

Card 1/3

The solution obtained is acidified with hydrochloric acid and precipitation of niobium with cupferron is repeated. The

Determination of Niobium in the Presence of Tungsten by the Aid of Cupferron

SOV/75-14-1-13/32

precipitate obtained is annealed (~10000) and weighed out as Nb205. The precipitation with cupferron takes place at room temperature. Filtering and washing of the precipitate is rapid and reliable. The results obtained from the determination show that for determining niobium in the presence of tungsten all three mentioned complex formers are suitable to the same degree for the masking of tungsten. By the aid of the radioactive isotope W185 the precipitates of Nb205 were investigated as to their tungsten content. The amount of tungsten co-precipitated was found to be dependent on that of niobium. On precipitating 10 mg Nb in the presence of 100 mg W more pure Nb20c containing no tungsten is obtained. Investigation of the precipitates that are obtained from the alloys W - Si - Nb showed co-precipitation of tungsten to occur only with niobium contents > 30%. The method devised is both rapid and accurate and permits the determination of niobium in the presence of

Card 2/3

Determination of Miobium in the Fresence of Tungsten by the Aid of Cupferron

SCV/75-14-1-13/32

large quantities of tungsten. Very detailed working instructions for the misbium determination based on this method are given with respect to W - Si - Rb alloys and tungsten-containing steeds. There are 3 tables and 5 references, A of which are Soviet.

A HOOD with a finetitude metallurmil in. A. A. Daylova Ah BOS, Foskva (inetitude of Vetallurmy imeni A. A. Baykov of the AS-USSR,

Moscow)

1.38.1.189: Larch 8, 1958

Card 3/3

S/509/60/000/004/022/024 E111/E152

AUTHORS:

Ponomarev, A.I., and Sheskol'skaya, A.Ya.

TITLE:

Determination of Niobium in Cast Irons

PERIODICAL: Akademiya nauk SSSR. Institut metallurgii. Trudy, No.4, 1960. Metallurgiya, metallovedeniye, fiziko-khimicheskiye metody issledovaniya, pp. 240-242

TEXT: The object of this work was to find a method of determining niobium in cast iron in the presence of iron and titanium, without their preliminary separation. Ascorbic acid C6H8O6 was used to form a complex with titanium and for reducing iron to the bivalent form in which it stays in solution. preliminary experiments the following procedure was developed. 1-1.5 g of the sample is treated with 5 ml of 1.40 s.g. nitric acid. After evaporation almost to dryness on a sand bath, the solution is completed by adding 30 ml of 1:2 hydrochloric acid and boiling. The volume of the solution is maintained by adding water. Ignoring any black light residue the solution is diluted to 180-190 ml, 1-2 g of ammonium chloride and 0.1-0.2 g of ascorbic acid are added and the temperature is raised $\bar{t}o$ 70-80 $^{\circ}$ C. Card 1/3

BOY OF THE STATE OF THE PERSON AND THE PERSON OF THE PERSO

S/509/60/000/004/022/024 E111/E152

Determination of Niobium in Cast Irons

10 ml of freshly prepared 1% aqueous tannide solution are slowly added with stirring, the heating being continued for 2-3 hours. Macerated paper is added and after cooling the precipitate is filtered and washed 6-8 times with cold 4% hydrochloric acid. The precipitate and paper are heated in a platinum crucible until all graphite has burned off. A few drops of water, 10-20 drops of 1:1 sulphuric acid and 2.3 ml of hydrofluoric acid are added and the crucible is gradually heated on a sand bath until SO3 fumes have been evolved for 5 min. 1-2 ml of water are added to the cooled crucible and evaporation is carried out until only 2-3 drops of sulphuric acid remain. After cooling, 1-2 ml of water and 5 ml of hydrochloric acid (s.g. 1.19) are added and the crucible is heated until all salts have dissolved. The solution is transferred to a beaker, diluted to 80-90 ml and the niobium is precipitated as before after addition of 0.10 g of ascorbic The filtered and washed precipitate and filter paper are heated to 1000 °C for 5-7 minutes in a platinum crucible which is then cooled in a desiccator and weighed. The residue is fused Card 2/3

S/509/60/000/004/022/024 E111/E152

Determination of Niobium in Cast Irons

with potassium pyrosulphate (0.5-1.0 g) and the melt is dissolved in 20 ml of 5% sulphuric acid with 1-2 drops of hydrogen peroxide. If the solution is colourless titanium is absent; if it is pale yellow it is diluted to 25 ml and its coloration compared with that of a standard titanium solution, the equivalent weight of titanium dioxide being subtracted from the weight of the niobium pentoxide precipitate.

There are 2 tables and 5 references: 3 Soviet, 1 English and 1 German.

Card 3/3

S/075/62/017/003/003/004 1017/1217

AUTHOR:

Sheskol'skaya, A. Y.

TITLE:

Determination of zirconium and niobium in their binary alloys using cupferron

PERIODICAL:

Zhurnal analyticheskoy khimii, v. 17, no. 3, 1962, 327-329

TEXT: A rapid and precise method for the determination of zirconium and niobium in their binary alloys, based on the successive precipitation of these elements using cupferron.

A review of the problem in the literature is given. Works of Alimarin and Schröder are cited and adapted. The results of a series of determinations of Nb and Zr in synthetic solutions containing tartaric acid are tabulated and the error calculated. The error varies in this case between 0-3% (relative).

The method of analysis of solutions containing Zr and Nb in a ratio of 1:1 and 3:1 is identical with that described here for samples of unknown composition.

PROCEDURE: 1) Determination of zirconium - 0.1 g of the sample is dissolved in a Pt-crucible by addition of 2-3 ml KF and a few drops of HNO₃ to the complete dissolution of the alloy. Then 3-4 ml H_2SO_4 (Sp. gr = 1.84) are added and heated in a sand bath, for 10-15 min. until white vapors appear and all the HNO₃ is removed. After cooling, 25 ml 4% solution of tartaric acid and 10 ml 2% soln. of NH₃fluoride are added and the solution is transferred to a 300 ml beaker. The solution (100-125 ml), is neutralised by

Card 1/2

Determination of ...

S/075/62/017/003/003/004 I017/I217

ammonia using phenol-red indicator: the color changes from red, through yellow, to red; 2 drops ammonia are added in excess. The solution is cooled to room temp. and Zr is precipitated by addition of 10-15 ml 6% aqueous cupferron soln., which is added slowly with stirring, the soln. is left in the cold one night. The precipitate is filtered off using a filter of 9 cm. M (white band), and washed 5-6 times with cold water. The precipitate with the filter paper is placed in a weighed Pt or porcelain crucible, ignited for 10-20 min. at 1000°C, cooled in a desiccator and ZrO₂ is weighed. The factor for Zr calculation from ZrO₂ is 0.7403.

2) Determination of niobium — 50 ml 2% soln. of boric acid, 5 ml HCl, 20-25 ml 6% aqueous soln. of cupferron are added to the filtrate obtained after the separation of the Zr by vigorous and constant stirring to complete coagulation of the precipitate. After filtration carried out under the same conditions as for the Zr separation, the 20 ml 6% aqueous cupferron soln. The precipitate with the filter is ignited in Pt or porcelain crucible for 15-20 min. at 1000°C cooled in a desiccator and the Nb₂O₄ weighed. The factor for the Nb calculation from Nb₂O₄ is 0.6990.

ASSOCIATION: Institut metallurgii im. A.A. Baykova, Akademii Nauk SSSR. (Institute of metallurgy

im. A. A. Baykov, Academy of Sciences, USSR) Moscow

SUBMITTED: May 8, 1961

Card 2/2

5/075/62/017/008/001/004 E071/E135

AUTHOR:

Sheskol'skaya, A.Ya.

TITLE:

Determination of zirconium in the presence of large

quantities of molybdenum and tungsten

PERIODICAL: Zhurnal analiticheskoy khimii, v.17, no.8, 1962,

949-951

The development of a method of direct determination of TEXT: zirconium in molybdenum and in alloys based on tungsten without their preliminary separation is described. The method is based on the precipitation of zirconium with cupferron at pH = 6.8 in the presence of tartaric and oxalic acids to retain molybdenum and tungsten in solution. The method was developed using pure solutions of the elements and this has shown that the accuracy of the method is high (e.g. 4 mg of zirconium in the presence of 550 mg of tungsten gave an error of +0.2 mg of zirconium). method was applied satisfactorily for the determination of small amounts of zirconium in molybdenum and tungsten alloys. analytical procedure is described in some detail. There are 2 tables.

Card 1/2

Determination of zirconium in the ... $\frac{5/075/62/017/008/001/004}{E071/E135}$

ASSOCIATION: Institut metallurgii im. A.A. Baykova, Moskva

(Institute of Metallurgy imeni A.A. Baykov, Moscow)

SUBMITTED: January 19, 1962

card 2/2

J. 10700-63 KWP(q)/EMT(m)/BDS--AFFTC/ASD--JI ACCESSION NR: AP3002539

\$/0075/63/018/006/0782/0783

AUTHOR: Sheskol skaya, A. Ya.

TITLE: Rapid gravimetric method for the determination of niobium in the presence of large quantities of molybdenum

SOURCE: Zhurnal analiticheskoy khimii, v. 18, no. 6, 1963, 782-783

TOPIC TAGS: niobium determination, alloys, molybdenum, gravimetric analysis

ABSTRACT: A rapid gravimetric method has been developed for the determination of niobium in metal alloys containing molybdenum without previous separation of molybdenum. The dissolution of alloy is accomplished with HF and HNO sub 3 in a platinum crucible with a subsequent addition of H sub 2 SO sub 4. The method is based on the precipitation of niobium with cupferron at a pH of 4.6 in presence of tartaric acid which complexes the molybdenum. The present method is more accurate than the existing hydrolytic methods which show low results when compared to standard solutions. Orig. art. has: 2 tables.

ASSOCIATION: Institut metallurgii im. A. A. Baykova, Moskva (The Institute of Metallurgy, Moscow)

Card 1/2/

KLUBOV, V.A.; SHESKUKOV, N.L.

Prespects for finding il in the Orenburg portion of the Kama-Kinel' system of troghs. Neftegaz. geol. i geofiz. no. 5:8-11 163. (MIRA 17:5)

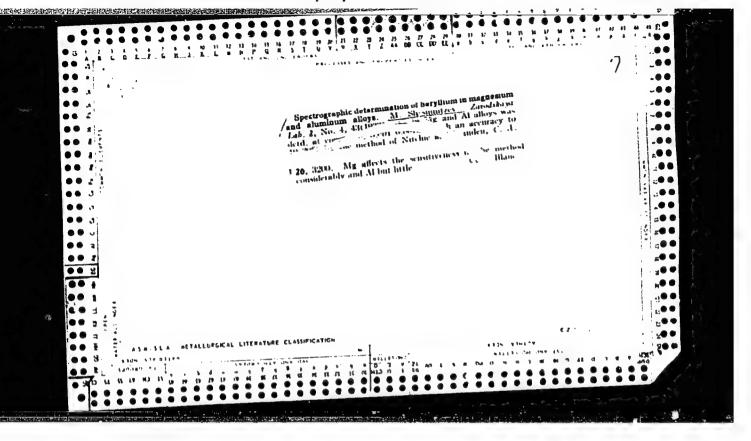
l. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochny neftyanoy institut i Neftepromyslovoy upravleniye "Buruuslarneft'".

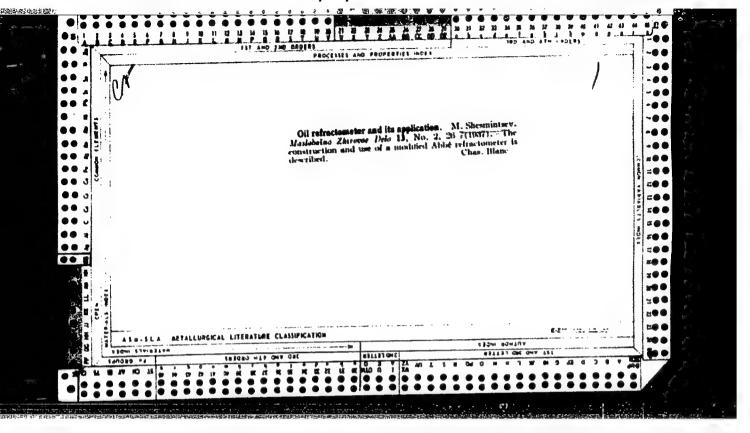
SHESHERPKOVA, L.

"Kistorical Dates of Cur Aviation and Aeronautics"

Izdatel'stvo Desaal, Moscow 1953

Translation - Lia 568547





SHEDI NISEV, H.

Mor., All-Union Electro-Technical Inst., Moscow, -1945-. "The Lighting System Aberration Effect on the Illumination of a Screen by an Infinitesmal Source of Light," Zhur. Tekh. Fiz., 14, Mos. 4-5, 1944; "On the Influence of Spheric Aberration on the Photometric Characteristics of Optical Apparatus," ibid., 16, No. 2, 1946; "On the Question of the Distribution of the Illumination in the Plane of the Image of Photographic Objectives," ibid., No. 4, 1946.

SHESMINTSEV, M.A.; YAKOVLEV, N.V.

High-illuminance mirror-lens systems used for image transmission.
Opt.-mekh.prom. 25 no.5:24-25 My '58. (MIRA 11:9)

(Optical instruments)

ACCESSION NR: AR4041593

S/0137/64/000/005/D038/D038

SOURCE: Ref. zh. Metallurgiya, Abs. 5D225

AUTHOR: Shesno, L. P.; Shevchenko, G. A. 3,

TITLE: Influence of method of heating of tilayer billets (steel E1847-armco iron) under hot rolling on inclination in intercrystalline corrosion of steel E1847 in Hotrolled clad pipes

CITED SOURCE: Sb. Proiz-vo trub. Vy*p. 10. M., Metallurgizdat, 1963, 106-109

TOPIC TAGS: bilayer billet, bilayer billet heating, hot rolling, intercrystalline corrosion, clad pipe/E1847 steel

TRANSLATION: In investigation conducted for clarification of the influence of the method of heating of bilayer billets under rolling on inclination of steel E1847 to intercrystalline corrosion, for abutment boundary contact with Armco Fe hotrolled billet of steel E1847 from automatic mill was used, which after boring and

Card 1/3

ACCESSION NR: AR4041593

machining to dimension of 82 x 9 millimeters did not manifest inclination to corrosion. Analysis of results of heating of abutment boundary contact pipe billets under rolling in muffles of carbon steel and steel EI847 shows that even under conditions of very thorough degreasing of surface of these billets, pipes become inclined to intercrystalline corrosion; heating in muffles of carbon steel is accompanied by appearance of significantly larger inclination of free surface of steel EI847 clad pipes to intercrystalline corrosion than during heating in muffles of steel E1847. It was established also that clad pipes are the less able to resist corrosion, the more hermetic the packing of the muffle in which billets for these pipes are heated. And only heating of billets under rolling without muffles (on hearth of continuous furnace) ensures obtaining of clad pipes not 'inclined to intercrystalline corrosion. This is explained by the fact that during heat treatment on hearth of continuous furnace products of combustion of remainders of lubricant, adsorbed in microdefects and micropores of steel EI847 are well eliminated, which cannot be achieved with usual chemical methods of degreasing. Furthermore, in hermetically closed muffles heightened pressure is created, increasing diffusion rate of C of remainders of adsorbing lubricant in depth of metal, and process of oxidation of surface proceeds less intensely. Intercrystal-

Card 2/3

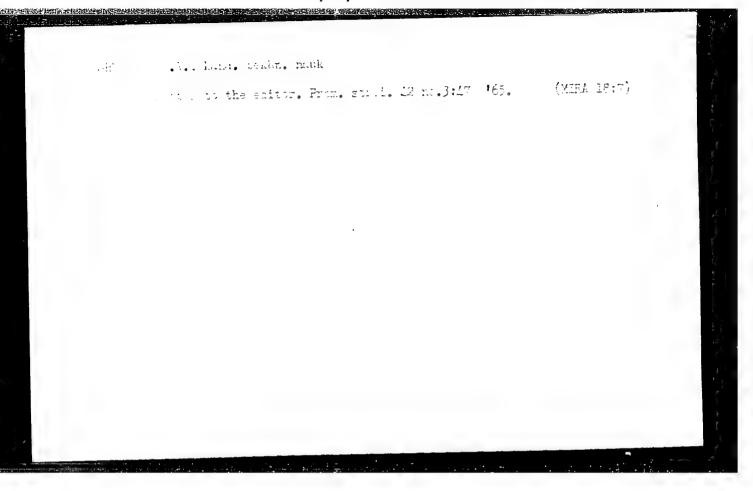
SHESTAK, G.A., kand. tekhn. nauk Recurrence of basic parameters of one-story industrial buildings of the machinery industry. From. stroi. 37 no.6:48-50 Je '59. (MIRA 12:8) (Factories -- Designs and plans)

KIKIN, A.I., prof.; BELENYA, Ye.I., prof.; STRELET.KIY, N.S., prof., doktor tekhn. nauk; LESSIG, Ye.N., dots.; BURHAROV, K.K., dots.; DUBLISKIY, G.S., dots.; SHESTAK, G.A., dots.; IGHAT'YEVA, V.S., dots.; RYBAKOV, V.M., dots.; GENIYEV, A.N., prof.; VEDENIKOV, G.S., dots.; TUBIN, S.M., kand. tekhn. nauk, nauchnyy red.; BEGAK, B.A., red. izd-va; OSENKO, L.M., tekhn. red.

[Metal construction; present state and outlook for future development] Metallicheskie konstruktsii; sostoianie i prespektivy razvitiia. Pod obshchei red. N.S.Streletskogo. Mosektivy razvitiia. Pod obshchei red. N.S.Streletskogo. Mosekva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 333 p. (MIRA 15:4)

1. Moscow. Moskovskiy inzhenermo-stroitel'nyy institut.
2. Kafedra metallicheskikh konstruktsiy Moskovskogo inzhenermo-stroitel'nogo instituta imeni V.V.Kuybysheva (for all except Tubin, Begak, Osenko).

(Building, Iron and steel)
(Aluminum, Structural)

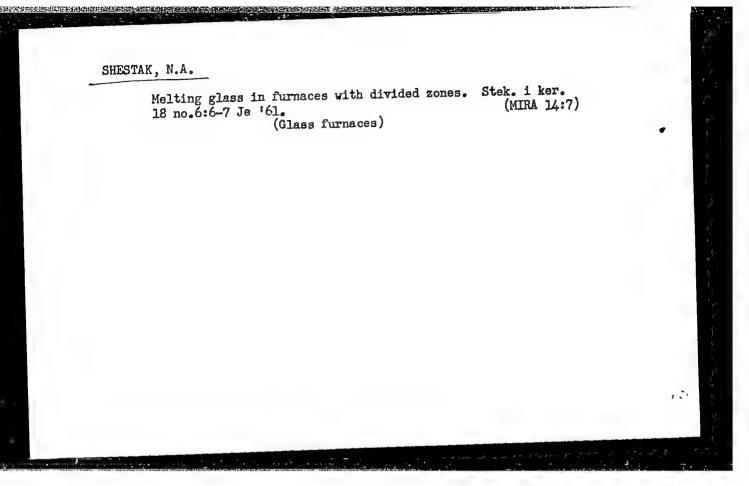


SHESTAK, Georgiy Andrianovich, kand. tokhn. nauk; GENIYEV, A.N., prof., retsenzent; ZELYATOROV, V.N., inzh., nauchn. rod.

[Designing steel structures for one-story industrial buildings]
Proektirovanie stal'nykh konstruktsii odnoetazhnogo promyshlennogo zdaniia. Moskva, Stroiizdat, 1964. 169 p.

(MIRA 17:4)

1. Kafedra metallicheskikh konstruktsiy Leningradskogo inzhenerno-stroitel nogo instituta (for Geniyev).

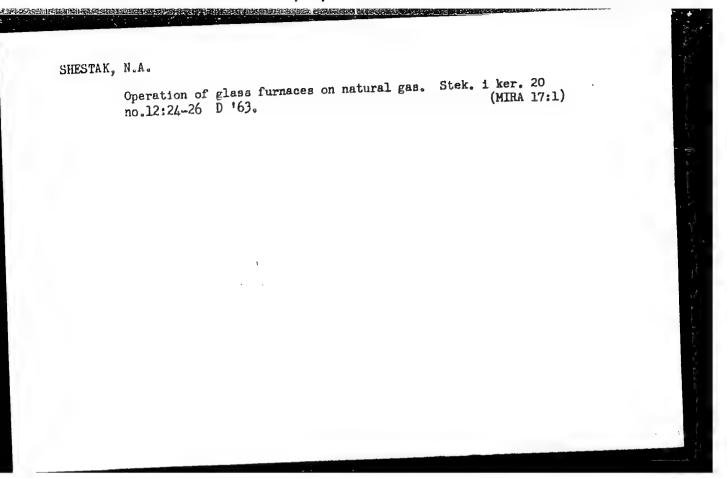


SHESTAK, N.A.; ROKHLIN, P.H.

Regenerative glass furnace with crosscurrent alignment of the flame.

Stek. i ker. 19 no.1:12-14 Ja '62. (MIRA 15:3)

(Glass furnaces)



SHESTAK, N.D., inchesor.

Apparatus for unleading leese materials from railroad platforms.
Avt.der.18 me.6:26 0'55.

(Leading and unleading)

(Leading and unleading)

SHESTAK, N.D., inzhener.

Erecting the framework of concrete plants. Avt.dor. 19 no.9:11-12 S 156.

(Concrete plants)

		s/081/62/000/006/099/117 B162/B101
	AUTHORS:	Dorogochinskiy, A. Z., Bashilov, A. A., Chertoryzhskiy, A. W., Arutyunova, O. L., Krechetova, P. I., Shestak, N. P.
	TITLE:	The problem of the choice of solvent for polymerisation of othylene into polyethylene at low pressure
š	PERIODICAL:	Referativnyy zhurnal. Khimiya, no. 6, 1962, 614, abstract 6P35 (Tr. Groznensk. neft. in-t, v. 3, sb. 25, 1961, 17-29)
ç	benzine as a at low press tion benzine	extraction is made of the possibility of using extraction a solvent for ethylene when polymerizing it into polyethylene sure. It is shown that the following are suitable: an extraction exaporating at 65-90°C with an arcmatic hydrocarbon 3.8% before de-aromatization and of 0.7% after de-aromatization.
•	or a fraction is not neede the presence process, but note: Compl	on evaporating at 75-95°C in the case of which de-aromatization on evaporating at 75-95°C in the case of which de-aromatization of the solvent of the solvent of the solvent of the polymerisation of the case of which de-aromatization of the case of which de-aro
·	or a fraction is not neede the presence process, but	on evaporating at 75-95°C in the case of which de-aromatization of the case of which de-aromatic hydrocarbon concentration of the case of
o ;	or a fraction is not neede the presence process, but note: Compl	on evaporating at 75-95°C in the case of which de-aromatization of the case of which de-aromatic hydrocarbon concentration of the case of

SHESTAK, N. P.; CHERTORIZHSKIY, A. V.; MIRSKIY, Ya. V.; MITROFANOV, M. G.; DEMENKOV, I. A.

Groznenskiy khimicheskiy zavod.

Adsorption properties of synthetic zeolites-molecular sieves and their use in the advanced-stage dehydration of monomers. Neftekhimia 2 no.4:512-518 Jl-Ag 162. (MIRA 15:10)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut i

(Zeolites) (Monomers)

GARBER, K.S., dotsent; NIKITIN, A.I.; LYAUDIS, B.V.; MALINOVSKIY, B.N., kand. tekhn.nauk; BEL'SKIY, O.I.; VOLKOV, L.G.; KUZNETSOV, M.P.; KUTSENKO, A.D., SOROKIN, A.A.; STAKHURSKIY, A.D.; TRUBITSYN, L.M.; TRUSEYEV, A.I.; SHAFRAN, I.K., inzh.; SHESTAK, P.I.; UL'YANOV, D.P.

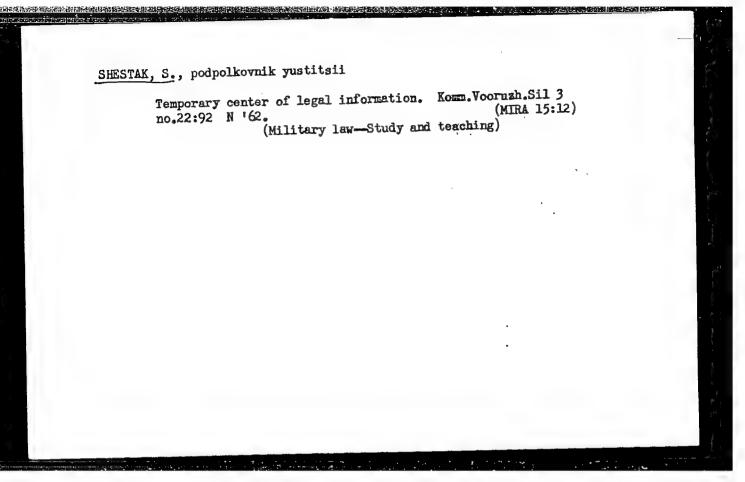
Automatic control of converter smelting by means of compu'rs. Stal' 23 no. 7:608-610 Jl '63. (MIRA 16:9)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz im. M.I. Arsenicheva (for Garger). 2. Institut kibernetiki AN UkrSSR (for Malinovskiy). 3. Zavod im. Dzerzhinskogo (for Shafran).

CHOFEAN, I.R., IVAMETO, G.TA., BOGGSLAVSKIY, TALA., SHESTAK, P. L.,

Pagentatrustion of the 1,150 blooming mill drives at the Dzerzhinskii Metallurgical Plant. Stall 24 no.5:432-433 My 164. (MIRA 17:12)

1. Dneprovskiy metallurgicheskiy zavod in. Dzerzhinakogo.



LUZANSIAYA, Dora Isaakovna; SHPARLINSKIY, V.M., spets. red.; AYNZAFT, Yu.S., red.; SHESTAK, S.N., red.

[Inland-water fisheries of the U.S.S.R. (lakes, rivers, and reservoirs); a guide] Rybokhoziaistvennoe ispol'zovanie vnutrennikh vodoemov SSSR (ozer, rek i vodokhranilishch); spravochnik. Moskva, Pishchevaia promyshlennost', 1965.
597 p. (MIRA 18:7)

Determining the toxicology of grain and combined feeds. Veterinarias (MIRA 10:11) 34 no.10:70 0 '57.

1. Chkalovskiy gosmedinstitut (for Lazareva). 2. Zaveduyushchiy khimiko-toksikologicheskim otdelom Cukalovskoy nauchno-issledovatel'skoy veterinarnoy stantsii (for Shestak)

(Feeding and feeding stuffa-Toxicology)

SHESTAK, S.S., nauchnyy sotrudnik; KORENEV, G.P.; KORENEVA, T.A.;

Use of SZHK (pregnant marels serum). Veterinariia 37 no.1:10-12 (MIRA 16:6)

1. Orenburgskaya nauchno-issledovatel'skaya veterinarnaya stantsiya (for Shestak). 2. Direktor Simferopol'skoy mezhsovkhoznoy laboratorii (for Korenev). 3. Simferopol'skaya mezhsovkhoznaya torii (for Koreneva). 4. Turkmenskaya NIIZhV (for Sapogov). laboratoriya (for Koreneva). (Veterinary medicine)

SHESTAKOV, A.

Reducing the cost of transportation. NTO 2 no.1:22-24 Ja '60. (MIRA 13:5)

1. Predsedatel' pravleniya Nauchno-tekhnicheskogo obshchestva Omskoy zheleznoy dorogi. (Omsk--Railroad research)

SHESTAKOV, A., tekhnik-stroitel; DIKIY, V.; TUMASYAN, I.; KLOKOV, N., inzhener-stroitel; POPOV, F., inzh.

Readers' letters. Sel'. stroi. 15 no.4:27 Ap '61. (MIRA 14:6)

l. Sel'khozinspektsiya Orshanskogo rayona, Mariyskoy ASSR (for Shestakov). 2. Predsedatel' kolkhoza imeni Kirova Yegorlyksogo rayona, Rostovskoy oblasti (for Dikiy). 3. Sekretar' partiynoy organizatsii kolkhoza imeni Kirova Yegorlykskogo rayona, Rostovskoy oblasti (for Tumasyan). 4. Sel'khozinspektsiya Khorol'skogo rayona, Primorskogo kraya (for Klokov).

(Farm buildings)

TSURIKOV, V. (Bryansk); SHESTAKOV, A.

From the history of fire prevention. Fozh.delo 8 no.6:32
Je '62. (Firemen)

SHESTAKOV, Anatoliy, inzh.

Tuning up and launching into operation of the Maritsa-Iztok I. Thermoelectric Plant. Elektroenergiia 13 no.5/6:34-37 My-Je *62.

l. Gl. inzhener na grupata suvetski spetsiali pri Teploelektricheskata tsentrala Maritsa-Iztok I $_{\circ}^{\rm R}$

。 1985年,1987年,1988年,1988年,1988年,1988年,1988年,1988年,1988年,1988年,1988年,1988年,1988年,1988年,1988年,1988年,1988年,1988年,19

25(1)

PHASE I BOOK EXPLOITATION

SOV/2330

Shestakov, Andrian Andrianovich

Machinist parovozdushnogo molota (Steam Hammer Operator) Moscow, Mashgiz, 1959. 118 p. Errata slip inserted. 8,000 copies printed.

Reviewer: P. G. Levandovskiy, Engineer; Eds.: B.N. Kazarinov, Engineer, and S. G. Puchkov, Engineer; Tech. Ed.: N. A. Dugina; Executive

Ed.: A. V. Kaletina, Engineer (Ural-Siberian Division, Mashgiz).

PURPOSE: This book is intended as a manual for steam hammer operators and repairmen, and may also be used by forging machine workers.

COVERAGE: The book provides information on open and closed die forging processes, on forgeability of metals, and equipment for heating forging stock. This book is primarily concerned with the constructions and performance of steam forging hammers and hydraulic and crank presses. No personalities are mentioned. There are 10 references, all Soviet.

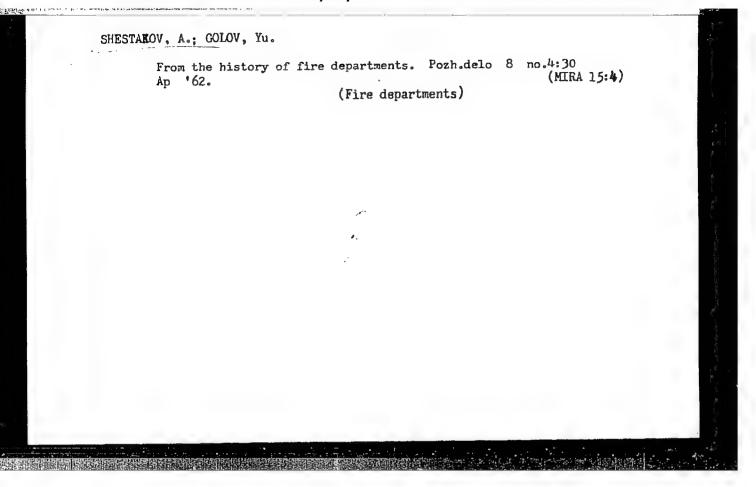
TABLE OF CONTENTS:

General Information on Open Die and Closed Die Forging Concept of the processes of open die and closed die forging

Card 1/4

Steam Hammer Operator	sov/2330
Heating metal for open die and closed die forging	h
Furnaces for heating metal	4 6 8 9
Classification of forging (Smith) machines	8
Purpose and classification of forging hammers	g
Sources of energy for forging nammers	10
Review problems	12
orking Principles of Steam Drop Hammers	12
Double frame drop hammer	13
Bridge-type drop hammers	13 20
Single-frame drop hammer	23
Review problems	26
team Distribution in Drop Hammers	27
Slide-valve steam distribution	
Valve steam distribution	32
Valve box of the "Eumuko" drop hammer	27 32 39 42
Setting valves	lio

Steam Hammer Operator	sov/2330
Hydraulic Presses Operating principles of a hydraulic press Classification of hydraulic presses Operating hydraulic presses Review problems	87 87 89 90 101
General Information of Other Forging Machines Pneumatic hammers Percussion power-screw presses Crank and eccentric press Upsetting machines Review problems	102 102 105 107 108 109
Safety Techniques Review Problems	11.0 114
Recommended Literature	116
AVAILABLE: Library of Congress (TS 225.547)	
Card 4/4	GO/fal 10-16-59



SHESTAKOV, A. A., Cand. Physicomath Sci.

Dissertation: "Behavior of Integral Curves of a System of Differential Equations in the Vicinity of a Lingulal Point of Higher Order." Sci Res Inst. of Mathematics, Moscow Order of Lenin State U imeni M. V. Lomonosov., 17 Dec 47.

SO: Vechernyaya Moskva, Dec 1947 (Project #17836)

SHESTAIRY, A. A.

Mor., Sci. Res. Inst. Math., Moscow State Univ. -cl248-. Mor., Geophysics Inst., Dept. Physico-Math. Sci., Acad. Sci., -cl249-. "Behavior of Integral Curves of the System of Ordinary Differential Equations in the Vicinity of a Singular Point," Dok. AN, 62, No. 2, 1948; "The Asymptotic Behavior of the Solutions of a Non-Linear System of Differential Equations," ibid., 62, No. 5, 1948; "The Behavior of Integral Curves of a System of Differential Equations in the Neighborhood of a Singular Point of Higher Order," ibid., 65, No. 2, 1949.

Sestakov, A. A. On the behavior of the integral curves of a system of ordinary differential equations in the neighborhood of a singular point. Doklady Akad. Nauk SSSR 171 174 1948. Russian; The equations

$$x_1 = \sum_{j=0}^{\infty} c_j x_1^j, \quad \dot{x}_2 = \sum_{j=1}^{\infty} a_{ij} x_j + X_2(x_1, x_2, \cdots, x_n),$$

$$i = 2, \cdots, n.$$

when the X_i being power series beginning with terms x_i and the X_i being power series beginning with terms x_i and the x_i being power series beginning with terms x_i and x_i and the x_i are supposed to have non-series x_i and x_i are supposed to have non-series x_i and x_i are supposed to have non-series x_i and x_i and x_i are supposed to have non-series x_i and x_i and x_i are supposed to have non-series x_i and x_i are supposed to have n

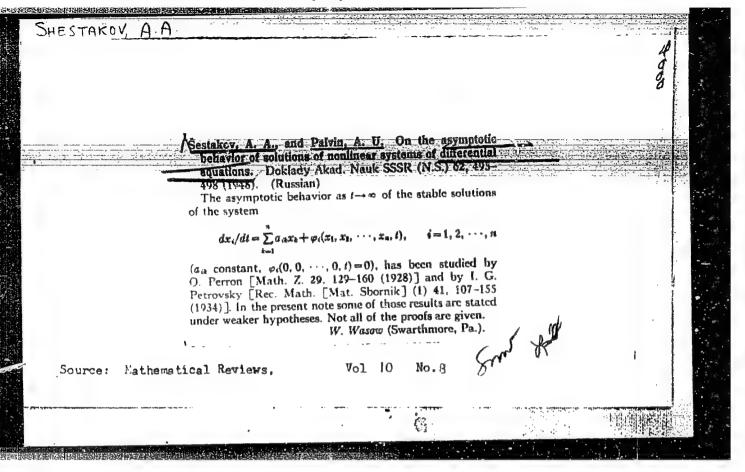
Source: Mathematical Reviews.

The singular point is classified as a node, a generalized saddle of the 1st, 2d or 3d type or a saddle-node, according to the signs of c_m and of the $\Re(\lambda_i)$ and whether m is even or odd. Theorem 2. If the λ_i are real and negative, $m \ge 2$, the solutions tending to 0 are tangent at the origin to the curve defined by equating to zero the second members of the last n-1 equations (1).

J. L. Massero.

Vol 10 No.

Ÿ

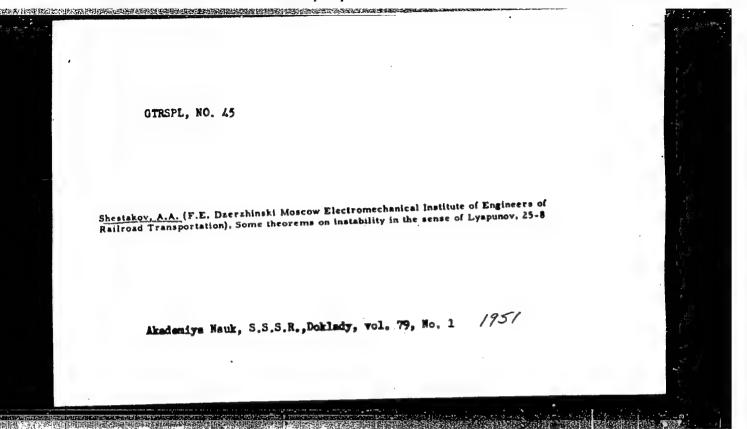


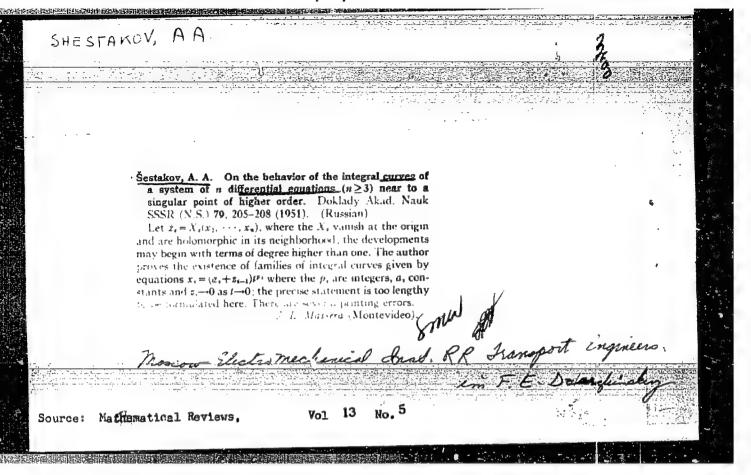
Sestakov, A. A. The behavior of the integral curves of a system of the form $\frac{dx_1}{dt} = X_1(x_1), \quad \frac{dx_i}{dt} = \varphi_i(x_1, x_i) + X_i(x_1, x_2, \dots, x_n)$ in the neighborhood of a singular point. Doklady Akad. Nauk SSSR (N.S.) 62, 591-594 (1948). (Russian) Previous results of the author [see the preceding review] are generalized to the present systems. He assumes that $0: x_1 = \cdots = x_n = 0$ is an isolated singular point, that $x_t = 0$ is an isolated root of X_1 , that $J = \int_0^{n_1} X_1^{-1} dx_1$ diverges, that $0 < m < \lfloor \varphi_i(x_i, z_i) - \varphi_i(x_i, \hat{x}_i) \rfloor / (x_i - \hat{x}_i) \rfloor < M$ if $x_i \neq \hat{x}_i$ (i=2, n) and that the X_i have continuous first partial derivatives vanishing at the origin. Theorem 2 of the previous paper is generalized as follows. In order that the integral curves which tend to O enter the origin along one and only one direction, the assumption $dX_{ij}dx_i\rightarrow 0$ as $x_i\rightarrow 0$ is sufficient. J. L. Massera (Montevideo). Source: Lathematical Reviews.

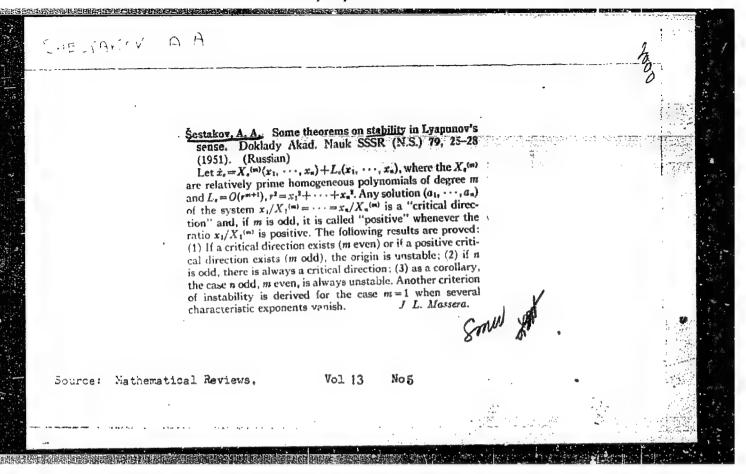
SHEWTAKOW, A. A.

h1982. Simotakov, A. A. PAYVIN, A. U.-- Ob asimptoticheskom povedenii resheniy nelinevnoy sistemy differentsial'nykh uravneniy. Doklady akad. Nauk SSSR, Novaya seriya, T. LCIII. No 5, 19h8. S. 495-98

SO: Latopis' Zhurnol'nykh Statey, Vol. 47, 1948







SHESTAKOV, A. A.

USSR/Mathematics - Monlinear Mechanics 1 Jul 51 Stability, Servo

"Certain Theorems Concerning Stability in Liapounoff's Sense," A. A. Shestakov, Moscow Electromech Inst of Engineers of Railroad Transport imeni F. E. Dzerzhinskiy

"Dok Ak Nauk SSSR" Vol LXXIX, No 1, pp 25-28

Considers the system of differential eqs of disturbed motion: $x_d^* = F_g(x_1,...,x_n)$, where $F_g(0,...,0)$ of (s=1,...,n). Derives some new criteria governing the stability or instability (e.g., nature of the roots of the characteristic eq), in the form of 4 theorems. Presented by Acad I. G. Petrovskiy 28 Apr 210751

SHESTAKOV, A. A.

"Distribution os Singular Points of a System of n Differential Equations", Tr. Kazansk, Aviats. In-ta, Vol 27, 1953, pp 41-50.

The author presents a development of Poincare's investigations of the distribution of singular points of a system of n differential equations inside an (n-1) dimensional manifold, where n is greater than or equal to 3. The system discussed is the following: $\frac{dxs}{dx} = x_s(x_1, ..., x_n), s = 1, 2, ..., n,$ $\frac{dx}{dt} = x_s(x_1, ..., x_n)$

where X_S and the partial derivative of X_S with respect to x_j are continuous and bounded in a bounded region $F(x_1, \ldots, x_n)$ <0 of n-dimensional space. (RZhNat, No 1, 1955). SO: Sum. No. 443, 5 Apr. 55

FUKS, Boris Abramovich, prof.; BAKHSHIYAN, F.A., prof.; ANDRIYEVSKIY,

F.P., dotsent; MIROSHKOV, R.K., dotsent; NAGAYEVA, V.M., dotsent;

SOBOLEV, N.A., dotsent; SOKOLOV, A.M., dotsent; SHAPIRO, Z.Ya.,

dotsent; SHUSHARA, G.N., dotsent; KAPLAN, I.B., starshiy pre
podavatel'; POLOZKOV, A.P., starshiy prepodavatel'; POLOZKOV,

D.P., starshiy prepodavatel'; TOPAZOV, N.G., starshiy prepoda
vatel'; SHCHERBAKOV, S.S., starshiy prepodavatel'; Prinimali

uchastiye: GOL'DENVEYZER, A.L., prof.; BARANENKOV, G.S., dotsent;

BERMAN, Ya.R., dotsent; LUNTS, G.L., dotsent; SHESTAKOV, A.A.,

dotsent; GMURMAN, V.Ye., starshiy prepodavatel'; Rozental', M.P.,

assistent; SOKOLOVA, L.A., assistent. ROZANOVA, G.K., red.izd-va;

KUZ'MINA, N.S., tekhn.red. (Continued on next card)

FUKS, Boris Abramovich--(continued) Card 2.

[Higher mathematics; methodological instructions and control assignments for the students of correspondence technical schools of university level] Vysahaia matematika; metodicheskie ukazaniia i kontrol'nye zadaniia dlia studentov zaochnykh vysahikh tekhnicheskikh uchebnykh zavedenii. Izd.9. Pod red.

B.A.Fuksa. Moskva, Gos.izd-vo "Sovetskaia nauka," 1958. 179 p.

(MIRA 12:9)

1. Russia (1923- U.S.S.R.) Ministerstvo vysahego obrazovaniya.

Metodicheskoye upravleniye.

(Mathematics--Study and teaching)

ZAPOROZHETS, G.I.; SHESTAKOV, A.A., red.; MEDVEDEVA, M.A., tekhn.red.

[Methodological handbook for solving problems on mathematical analysis] Metodicheskoe rukovodstvo k resheniiu zadach po mate-maticheskomu analizu. Moskva, Vees. zaochnyi in-t inzhenerov zhel-dor. transporta. Pt.l. 1959. 202 p. (MIRA 13:5)

(Nathematical analysis)

20.

16(1) AUTHOR:

Shestakov, A.A.

507/42-14-1-23/27

TITLE:

Theorems on the Existence of Integral and Critical Straight Lines of a Homogeneous System of n Differential Equations $(n \ge 3)$ (Teoremy o sushchestvovanii integral'nykh i kriticheskikh pryamykh odnorodnoy sistemy n differentsial'nykh uravneniy $(n \ge 3)$)

PERIODICAL: Uspekhi matematicheskikh nauk, 1959, Vol 14, Nr 1, pp 245-248 (USSR)

ABSTRACT: The author considers the system

where the $X_s^{(m)}(x_1,...,x_n)$, $m \ge 2$, $n \ge 3$, where the $X_s^{(m)}$ are forms of m-th degree. The real solutions $g = (g_1,g_2,...,g_n)$ of the algebraic equations $x_1:X_1^{(m)}=x_2:X_2^{(m)}=$ $\dots = x_n:X_n^{(m)}$ define the straight lines $x_p:x_n=g_p:g_n$; these are integral curves of (1). Theorem 1 is already announced in \sqrt{Ref} 1...

Theorem 2: If m is odd, then (1) has at least one integral straight line. Definition: If a solution runs at infinity in

Card 1/2

Theorems on the Existence of Integral and Critical Straight Lines of a Homogeneous System of n Differential Equations (n≥3)

SOV/42-14-1-23/27

the direction $g = (g_1, \dots, g_n)$, then this straight line is called

Theorem: The critical straight lines are integral straight lines. There are 2 references, 1 of which is Soviet, and 1 German.

SUBMITTED: November 4, 1957

Card 2/2

Card 1/2

161 .) SOV/39-49-1-1/5 Pknakadze, A.V., and Shestakov, A.A. AUTHORS: (Moscow) On the Classification of Singular Points of a First Order TITLE: Differential Equation Where the Derivative is Not Given Explicitly FERIODICAL: Matematicheskiy sbornik, 1959, Vol 49, Nr 1, pp 3-12 (USSR) Given the Differential equation ABSTRACT: F(x,y,y') = 0.To the solutions y = f(x) there correspond those curves of the surface F(x,y,p) = 0(s) for which (2) -p dx + dy = 0.The equations of these curves are $\frac{dx}{dt} = -F_p, \quad \frac{dy}{dt} = -p F_p, \quad \frac{dp}{dt} = F_x + p F_p.$ The singular points (x_0,y_0,p_0) of (3) are defined by F=0, $F_p = 0$, $F_x + pF_p = 0$. Definition: If $(x_0, y_0, p_0) \in S$ is a singular point of (3), then (x_0,y_0) is called a singular point of (1).

Or the Classification of Singular Points of a First Order Differential Equation Where the Derivative is Not Given Explicitly 507/39-49-1-1/5

This definition deviates from the definition of J.G.Petrovskiy Ref 1 7 and gives the possibility of a classification of the singular points of (1). With the aid of the Taylor development of F the authors obtain the "differential equation of the first approximation":

(7) $\frac{1}{2}(F_{pp})p^2+(F_{xp})xp+\frac{1}{2}(F_{xx})x^2+F_yy=0$, where $0(x^3+p^3)$ is neglected since these terms have no influence the behavior of the integral curves in the neighborhood of the singular point. Differentiating (7) with respect to x and considering p as a function of x, then there follows

(13) $\frac{d\mathbf{r}}{d\mathbf{x}} = \frac{2\beta \mathbf{x} + (\alpha + \gamma)\mathbf{p}}{-(\alpha + \gamma)\mathbf{p}},$

where α , β , γ are certain constants. Now the classification of the signiar points is transferred from (13) to (7) and further to (1), where three principal types are distinguished: elliptic, hyperbolic, and parabolic singular points. There are 5 figures, and 2 references, 1 of which is Soviet, and 1 French.

SUBMITTED: Jari 2/2 November 18, 1957

S/020/60/131/05/14/069

16:3400

AUTHOR: Shestakov, A.A.

TITLE: Asymptotic Behavior of Solutions to Multidimensional Systems of Ordinary Differential Equations (Having a Singular Point of Higher Order

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 131, No. 5, pp. 1038-1041

TEXT: In the present paper the author continues his earlier investigations (Ref. 1, 2). He considers the system

(1) $\frac{dx}{dt} = X(x), \quad x = (x_1, \dots, x_n), \quad n \geqslant 3,$

where the components of the vector $\mathbf{X}(\mathbf{x})$ are power series of the coordinates of the point x containing no free terms and no terms of first order. Beside of (1) the author considers a certain "shortened" system

(4) $\frac{dx_s}{dt} = \gamma_s(x_1, \dots, x_n),$

which has two parabolic solutions which tend to zero for $t \longrightarrow \pm \infty$. Then the

X

Card 1/2

S/199/61/002/005/004/006 B112/B138

16,3400

AUTHOR:

Shestakov, A. A.

TITLE:

Asymptotic behavior of the solutions of a multidimensional system of differential equations having a singular point of

higher order

PERIODICAL:

Sibirskiy matematicheskiy zhurnal, v. 2, no. 5, 1961,

767 - 788

TEXT: The author considers systems of the form dx/dt = X(x), X(0) = 0, where X is an n-dimensional homogeneous function of x of the degree m ≥ 2 .

The solutions are represented in the form $x = e_0 \omega \text{mod}(c_0 + t)^T$. e_0 is a root of the equation $e_0^{2m-2} = 1$ ($e_0^{m-1} = +1$ for $c_0 \ge 0$, $e_0^{m-1} = -1$ for $c_0 < 0$).

In order to study the asymptotic behavior of the solutions, the author replaces the system dx/dt = X(x) by two systems $\tau dy/d\tau = Ly$ and

 $\vec{\tau} d\vec{y}/d\vec{\tau} = M\vec{y}$ of the Poincaré-Lyapunov type, where $L = (1 - m)X(\omega) - E$ and $M = (m-1)X(\omega) - E$. The corresponding transformations are $\tau = (c_0 - t)^r$,

Card 1/2

31100 S/199/61/002/005/004/006 B112/B138

Asymptotic behavior of the ...

 $x=(\omega+y)\tau$ and $\overline{\tau}=(c_0-t)^r$, $x=(\overline{\omega}+\overline{y})\overline{\tau}$. The eigenvalues of L and M are characteristic of the asymptotic behavior of the solutions. Several theorems concerning this behavior are derived. There are 10 Soviet references.

4

SUBMITTED: August 13, 1960

Card 2/2

SHESTAKOV, A.I., red.; IVANUSHKO, N.D., red.; SVESHNIKOV, A.A., tekhn. red.

[Programmed teaching and cybernetic teaching machines; collection of scientific and technical articles] Programmirovannoe obuchenie i kiberneticheskie obuchaiushchie mashiny; nauchno-tekhnicheskii sbornik statei. Moskva, "Sovetskoe radio," 1963. 247 p. (MIRA 17:3)

18.7200

82292 \$/135/60/000/007/010/014 A006/A002

AUTHORS:

Gritsenko, A.F., and Shestakov, A.I., Engineers

TITLE:

Pressure-Butt Welding of Aluminum-Magnesium Alloy Parts of up to

10,000 mm2 Cross Section

PERIODICAL:

Svarochnoye proizvodstvo, 1960, No. 7, pp. 30-33

TEXT: The Laboratory of Electrothermics of the Institut elektrotekhniki AN USSR (Institute of Electric Engineering AS UkrSSR) and a machinebuilding plant developed a technology of pressure-butt welding of aluminum-magnesium alloy blanks (AMI-5BM(AMg5VM) and AMI3 (AMg3)) of up to 10,000 mm² cross section. The experimental investigation was carried out on a special installation designed by P.A. Pleskanovskiy (Figure 1). The ring-shaped blanks to be welded were decreased and heated up to 450°C. To carry out additional heating of high-strength alloys the installation was equipped with an induction heater. Welding was performed at a specific reduction pressure of 120 kg/mm² (the reduction rate was 0.5 m/min, the magnitude of reduction was 140 mm). One half of the specimens cut out from the weld joints were annealed at 280°C, and were then subjected to tension and bending tests. During tension the specimens broke down in the base metal. The weld joints had a high ductility. Macro- and micro-investigations showed the absence of inter-

Card 1/2

S/135/60/000/007/010/014 A006/A002

Pressure-Butt Welding of Aluminum-Magnesium Alloy Parts of up to 10,000 mm² Cross Section

face boundaries, pores and cracks. Due to the presence of vanadium in the AMg5VM alloy, relatively short heating and low temperatures, the tendency to grain growth under pressure welding conditions did not considerably affect the mechanical properties of weld joints. The structure of AMg3 alloy joints was slightly coarser grained than that in the initial alloy. A slight increase in hardness was observed in the transition areas of the base metal to the butt. X-ray examination of AMg5VM specimens of 4,500-6,000 mm² cross section did not reveal any defects. The tests proved that the strength of weld joints produced by the described technology was equal to that of the base metal, with satisfactory bending angle values. Annealing to 280°C did not have any essential effect on the mechanical properties of the joints. The method is simple and economical. There are 5 photographs and 1 table.

Card 2/2

հե620 S/135/63/000/001/003/016 A006/A101

AUTHORS:

Khrenov, K. K., Academician of AN UkrSSR, Shestakov, A. I.,

Engineer

TITLE:

On plastic deformation in pressure butt welding

PERIODICAL: Svarochnoye proizvodstvo, no. 1, 1963, 11 - 12

TEXT: It is proposed to determine plastic deformation in cold and pressure butt-welding from the volume of the extruded metall (burr). The metal cut-off during welding is weighed and the value obtained is divided by the specific metal weight. The proposed method is illustrated by examples which show that the notion of the "deformation degree" should be replaced by the term "deformation value", which can be experimentally determined. Butt welding should be performed with optimum deformation value. It is the decisive factor of the process: lower deformation reduces the strength and ductility of the weld and increased deformation raises the metal consumption. There are 4 figures.

ASSOCIATION: Institut elektrotekhniki AN UkrSSR (Institute of Electric Engineering, AS UkrSSR)

Gard 1/1

S/125/62/000/005/009/010 D040/D113

Pressure welding of rolled....

upsetting is doubled. The metal is heated to plastic state, clamped in special holding clamps, and upset in several reprisals. The clamps have a large gripping surface, hold the metal by friction, and thus do not deform the surfaces. Metal with surface defects and oxide films is squeezed out into the burr. Metallographic investigation of samples taken at different stages of the process reveals diffusion, fine metal structure, and absence of an overheated zone. The struc ture in the butt joint zone consists mainly of a solid solution of Mg in Al, and a very small β -phase. In tests, the bend angle of metal specimens from the joint is lower than in the base metal, and the impact strength 50% lower, simply because of the anisotropy of Al-Mg alloys. Conslusions: (1) Al-Mg alloy elements can be pressure butt-welded; (2) the quality of welded joints is high; (3) the techniques introduced at some heavy-machinery plants and developed for pressure butt welding elements with a cross section area of up to 10,000 mm2 are recommended for extensive application. There are 3 figures and 2 tables. Institut elektrotekhniki AN USSR (Electrical Engineering Institute, ASSOCIATION:

AS UKrSSR)

SUBMITTED: February 10, 1962

Card 2/2